

## CLAIMS

1. An in vivo imaging device comprising:  
a support having a first and second face, the first face having thereon an antenna; and the second face of the support having thereon a transmitter.
2. The in vivo imaging device according to claim 1, wherein the support is selected from a group consisting of: PCB, plastic board and sheet.
3. The in vivo imaging device according to claim 1 wherein the antenna is selected from a group consisting of: a single ring and a coil.
4. The in vivo imaging device according to claim 1, wherein the antenna is mounted around the periphery of the support.
5. The in vivo imaging device according to claim 1, comprising an isolation element.
6. The in vivo imaging device according to claim 5, wherein the isolation element is selected from a group consisting of: plastic, polymer, or ABS.
7. The in vivo imaging device according to claim 5, wherein the isolation element is selected from a group consisting of: an opaque barrier, a translucent barrier, a light trap, and an optical filter.
8. The in vivo imaging device according to claim 5 wherein the isolation element is an extension of a component of said in vivo imaging device.

9. The in vivo imaging device according to claim 8 where in the component is selected from a group consisting of: a dome, a lens, the illumination source, the image sensor, and the support.
10. The in vivo imaging device according to claim 5, wherein the isolation element is to support an optical system.
11. The in vivo imaging device according to claim 1 wherein the image sensor is selected from a group consisting of: CCD and CMOS.
12. The in vivo imaging device according to claim 1 comprising an optical system with a focal distance between 0 to 40 mm.
13. The in vivo imaging device according to claim 1 comprising an optical system with a field of view between about 80 and 140 degrees.
14. The in vivo imaging device according to claim 1 comprising a ballast weight.
15. A method of manufacturing a substantially spherical in vivo imaging device, said method comprising the steps of:
  - mounting an image sensor and a transmitter on a single support; and
  - encapsulating said support in a substantially spherical housing.
16. The method according to claim 15 comprising the step of mounting the transmitter on one face of the single support and mounting an antenna on a second face of the single support.
17. The method according to claim 15 comprising the step of including a ballast within the substantially spherical housing.
18. The method according to claim 15 comprising the step of attaching a ballast on a lower portion of the substantially spherical housing.

19. The method according to claim 15 wherein the spherical housing comprises a substantially transparent dome.

20. An in vivo imaging device comprising:

- a support;
- a transmitter mounted on the support; and
- an antenna embedded within the support.

21. The device of claim 20, comprising a ballast.

22. The device of claim 20, comprising a substantially spherical shell, wherein the support, transmitter and antenna are disposed within the shell.

23. The device of claim 20, comprising an imager.

24. An in vivo imaging device comprising:

- a transmitter;
- an isolation element; and
- an antenna attached to the isolation element.

25. The device of claim 24, comprising a ballast.

26. The device of claim 24, comprising a substantially spherical shell.

27. The device of claim 24, wherein the antenna is disposed substantially within the isolation element.

28. The device of claim 24, wherein the antenna is mounted on a surface of the isolation element.

29. The device of claim 24, wherein the isolation element is to optically isolate sections of the device.

30. The device of claim 24, comprising an imager.